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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,345

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Naoki Hori

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EXAMINER

BUTCHER, BRIAN M

ART UNIT

PAPER NUMBER

2627

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,345	Applicant(s) HORI ET AL.	
	Examiner BRIAN BUTCHER	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 11, 14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admission of Prior Art, hereinafter referenced as AAPA.

Regarding **claim 10**, AAPA discloses "A data storage method . . .a recording medium" (page 26 of Applicant's specification, lines 26 - 28, and figure 10), "a plurality of pieces of audio data . . .to one of the pieces of audio data" (page 23, lines 26 - 28), "storing the read pieces . . .and an audio data area for storing audio data" (page 26, line 26 through page 27, line 22), "a default setting step . . .audio data area" (page 27, lines 2 - 4), "a management information storing step . . .the management information area" (page 27, lines 7 - 9, and figure 11 (Notice that the management information is sequential in figure 11 (c).)), "a re-setting step . . .management information is stored" (page 28, lines 19 - 21, and figure 12A (Notice that the management area is increased because storage space is needed for file management information which is beyond the initial storage size of the area. In other words, the initial file management area is full.)), and "an audio data storing step . . .from the recording medium" (page 27, lines 4 - 6 and page 28 lines 19 - 21 (Notice that the audio data area remaining after the partition of

figure 12A is of a remaining capacity resulting from the increase in additional storage space required for storing file management information.)).

Regarding **claim 11**, AAPA discloses everything claimed as applied above (see claim 10, in addition, AAPA discloses that the step of storing management information is performed again after a determination as to whether all management information is acquired is made (page 27, lines 7 – 15) and that the memory 10 is partitioned as shown in figure 12A when additional file management information storage area is needed.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of AAPA by specifically using the additional teachings in AAPA to perform "the re-setting step" repeatedly because one having ordinary skill in the art would want to ensure that all file management information read is stored in the memory 10.

Regarding **claim 14**, AAPA discloses everything claimed as applied above (see claim 10), in addition, AAPA discloses that the file management information area 920 stores file names of corresponding audio data (page 27, line 27 through page 28, line 1).

Regarding **claim 16**, AAPA discloses everything claimed as applied above (see claim 10), in addition, AAPA discloses "wherein the recording medium in an optical disc medium" (page 26, lines 26 - 28).

Regarding **claim 18**, AAPA discloses everything claimed as applied above (see claim 10), in addition, AAPA discloses an audio data area a management information

area of a memory 10 which are different area of the same memory and exist at the time the reading of management information is completed (page 27, lines 2 - 15 and lines 16 - 22 (Notice that the process performed in lines 2 - 15 results in the structure of the memory 10 in line 16 - 20.)).

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable APPA, in view of Tanji.

Regarding **claim 12**, AAPA and Tanji, the combination of hereinafter referenced as AT, disclose everything claimed as applied (see claim 10), specifically, Tanji discloses a format for storing audio data and management data of a conventionally known digital audio recorder (paragraph [0016], lines 1 - 4, and figure 2) in which management data is recorded from a starting address and audio data is recorded from an address directly after the ending address of management data.

Therefore, it would have been obvious to modify the method of AAPA by specifically using the teachings in Tanji to store read management information and audio data in the claimed order because one having ordinary skill in the art would want to ensure that file management information has priority over audio data (i.e. a non-mobile device).

Regarding **claim 13**, AT disclose everything claimed as applied (see claim 10), specifically, Tanji discloses a format for storing audio data and management data in which audio data is given address priority over management data (paragraph [0015], lines 1 - 4, and figure 1) which resembles the memory structure of figure 11 of AAPA in

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which file management information is recorded starting from an immediate end address of the audio data area reserved.

Therefore, it would have been obvious to modify the method of AAPA by specifically using the teachings in Tanji to store read management information and audio data in the claimed order because one having ordinary skill in the art would want to ensure that audio data has priority over file information data (i.e. a mobile device).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable AAPA, in view of Millikan et al. (United States Patent Application Publication US 2003/0210617 A1), hereinafter referenced as Millikan.

Regarding **claim 15**, AAPA discloses everything claimed as applied above (see claim 10), however, AAPA fails to disclose "wherein the plurality of pieces . . . a predetermined compression format".

In a similar filed of endeavor, Millikan discloses a media player that allows compresses media files from a recording medium to played back while avoiding breaks in audio due to mechanical disturbances (paragraph [0013], lines 1 - 9).

Therefore, it would have been obvious to modify the method of AAPA by specifically using the teachings in Millikan to store/playback audio data of a predetermined compression format because one having ordinary skill in the art would want to be able to have more audio data available than that possible with a standard compact disc having uncompressed data.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable APPA, in view of Fontijn et al. (United States Patent Application Publication US 2006/0013088 A1), hereinafter referenced as Fontijn.

Regarding **claim 17**, AAPA discloses everything claimed as applied above (see claim 10), however, AAPA fails to disclose "in the re-setting step . . . a predetermined capacity".

In a similar filed of endeavor, Fontijn discloses a disc recording device in which a minimum buffer size is maintained to ensure playback (paragraph [0054], lines 1 - 13).

Therefore, it would have been obvious to modify the method of AAPA by specifically using the teachings in Fontijn to ensure that the capacity of the audio data area is reduced no smaller than a certain minimum capacity because one having ordinary skill in the art would want to prevent playback interruption (AAPA, page 29, lines 1 - 3).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable APPA, in view of Fontijn, and further in view of Suzuki (United States Patent Application Publication US 2002/0012297 A1), hereinafter referenced as Suzuki.

Regarding **claim 19**, AAPA and Fontijn disclose everything claimed as applied above (see claim 10 and claim 17), specifically, see the argument of claim 17 in regard to maintaining a minimum buffer capacity which further lends itself to "a minimum setting step . . . of the audio data area". However, AAPA and Fontijn fail to disclose "if the capacity . . . from the recording medium".

In a similar filed of endeavor, Suzuki discloses a method of recording information using a buffer and a determination of the amount of data (to be recorded) in the buffer to determine whether recording is appropriate (paragraph [0025], lines 1 - 3, and figure 4). Notice that recording and reproduction are of a dual nature and that the allowance and suspension of recording based upon the amount of data stored to a buffer of a certain size lends itself to the suspension of reading information due to a buffer that is seen as full from the perspective of the file management information area.

Therefore, it would have been obvious to modify the method of AAPA by specifically using the teachings in Suzuki to stop a recording/reproduction operation based on a comparison of the state of a buffer or memory because one having ordinary skill in the art would want to prevent playback interruption (AAPA, page 29, lines 1 - 3). In addition, see the same reason for making the combination of AAPA and Fontijn as described in the argument of claim 17.

Response to Arguments

Applicant's arguments with respect to claims 10 - 19 have been considered but are moot in view of the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN BUTCHER whose telephone number is (571)270-5575. The examiner can normally be reached on Monday – Friday from 6:30 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young, can be reached at (571) 272 - 7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/BMB/
March 23, 2009

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627

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